

Mineral Industry Surveys

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NICKEL IN JANUARY 2006

Reported domestic nickel consumption in January increased about 11% compared with that in December 2005 and about 6% compared with that in January 2005, according to the U.S. Geological Survey. There were significant increases in consumption of nickel in the "other use" category (+31%) and

electroplating (+11%), which more than offset a decrease in consumption of nickel in stainless and heat resisting steel (-6%). Sales of nickel to platers averaged about 30 metric tons per day in January. Percentages reported in this paragraph are based on data concealed to avoid revealing individual company proprietary data.

TABLE 1
CONSUMPTION OF NICKEL (EXCLUSIVE OF SCRAP), BY FORM AND USE¹

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total	Total year to date
2005:					
January	5,100 ^r	543	44	5,690 ^r	5,690 ^r
February	5,030 ^r	464	44	5,540	11,200
March	5,090	567	44	5,700	16,900
April	5,410	430	50	5,890	22,800
May	5,010 ^r	520	41	5,570 ^r	28,400
June	5,440 ^r	541	44	6,020 ^r	34,400
July	4,590	378	38	5,010 ^r	39,400
August	5,060	437	42 ^r	5,540	45,000 ^r
September	5,190	658	44	5,900	50,800
October	5,230 ^r	708	44 ^r	5,980 ^r	56,800
November	5,220 ^r	585	57 ^r	5,860 ^r	62,700
December	4,750	619	52 ^r	5,420	68,100 ^r
January-December	61,100	6,450	544 ^r	68,100	XX
2006:					
January					
Steel:					
Stainless and heat resisting	1,150	542	W	1,690	1,690
Alloy (excludes stainless)	341	--	--	341	341
Superalloys	1,180	--	W	1,180	1,180
Copper-nickel alloys	W	--	--	W	W
Electric, magnetic, and expansion alloys	15	--	--	15	15
Other nickel & nickel alloys	W	--	W	W	W
Cast iron	W	--	--	W	W
Electroplating (sales to platers)	923	--	--	923	923
Chemical and chemical uses	W	--	--	W	W
Other uses	1,810	--	55	1,860	1,860
Total reported	5,420 ²	542	55	6,010	6,010
Total all companies (calc) ³	XX	XX	XX	11,300	11,300

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Other uses" category. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Of consumption, 4,470 metric tons were consumed as cathodes and pellets, the remainder as briquets and powder.

³Figures represent calculated apparent consumption; based on the revised proportion of reported primary consumption (53.17%) to apparent primary consumption for 2003.

TABLE 2
ENDING STOCKS OF NICKEL (EXCLUSIVE OF SCRAP) HELD BY CONSUMERS,
BY FORM AND USE^{1,2}

(Metric tons, nickel content)

Period	Cathodes, pellets, briquets, and powder	Ferronickel	Oxide-sinter, salts, and other forms	Total
2005:				
January	1,750 ^r	265	137	2,150 ^r
February	1,860 ^r	268	160	2,290 ^r
March	2,270 ^r	279	140	2,690 ^r
April	1,900 ^r	285	141	2,330 ^r
May	2,000 ^r	274	144	2,420 ^r
June	1,860 ^r	310	132	2,300 ^r
July	1,610 ^r	283	141	2,030 ^r
August	1,680 ^r	276	139	2,100 ^r
September	1,680 ^r	273	153	2,110 ^r
October	1,660	279	147	2,090 ^r
November	1,720 ^r	307	147	2,170
December	2,050 ^r	300 ^r	146 ^r	2,500 ^r
2006:				
January:				
Steel (stainless, heat resisting and alloy)	734	287	(3)	1,020
Nonferrous alloys ⁴	963	W	(3)	963
Foundry (cast irons)	(3)	W	--	(3)
Chemical (catalysts, ceramics, plating salt, etc.) and unspecified uses	149	W	168	317
Total	1,850	287	168	2,300

^rRevised. W Withheld to avoid disclosing company proprietary data. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Stocks held by companies that consume nickel in more than one end use category are credited to the major category. Stocks are subject to revisions owing to inventory adjustments.

³Included in the "Chemical and unspecified uses" category.

⁴Includes superalloys, nickel-copper and copper-nickel alloys, permanent magnet alloys, and other nickel alloys.

TABLE 3
CONSUMPTION AND ENDING STOCKS OF PURCHASED SECONDARY NICKEL, BY USE¹

(Metric tons, nickel content)

Period	Consumption			Stocks		
	Ferrous scrap ²	Nonferrous scrap ³	Total scrap	Ferrous scrap ²	Nonferrous scrap ³	Total scrap
2005:						
January	5,720	648	6,370	2,330	72	2,400
February	4,680	736	5,420	2,440	82	2,530
March	4,510	799	5,310	2,490	96	2,590
April	4,930	762	5,700	2,510	95	2,610
May	3,790	776	4,560	2,620	93	2,710
June	4,520	698	5,220	2,810	115	2,930
July	4,120	658	4,780	2,740	102	2,840
August	4,360	748	5,110	2,630	113	2,740
September	4,490	709	5,200	2,800	99	2,900
October	5,000	638	5,640	3,010	110	3,120
November	5,520	611	6,130	2,630	98	2,730
December	4,530	593	5,130	2,470	89	2,560
January-December	56,200	8,380	64,600	XX	XX	XX
2006:						
January	3,710	708	4,420	2,600	100	2,700

XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Nickel content is calculated from an average nickel content and the reported gross weight of scrap.

³Combined consumption and stocks of aluminum-base, copper-base, and nickel-base scrap.

TABLE 4
U.S. IMPORTS FOR CONSUMPTION OF NICKEL, BY COUNTRY¹

(Metric tons, nickel content)²

Period and country of origin	Cathodes pellets, and briquets	Powder and flakes	Ferro- nickel	Metal- lurgical- grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total ³	Total year to date ⁴	Wrought nickel
2004:										
December	9,380	814	1,730	170	403	1,340	295	14,100	155,000	46
January-December	107,000	9,220	13,900	1,210	7,850	11,000	4,440	155,000	XX	796
2005:										
January	9,040	756	1,940	114	585	780	279	13,500	13,500	40
February	10,200	596	2,040	122	524	853	360	14,700	28,200	95
March	7,600	1,010	1,950	488	629	750	334	12,800	40,900	81
April	11,100	813	1,820	325	515	1,070	316	16,000	56,900	65
May	9,140	866	1,260	257	595	831	407	13,400	70,300	75
June	9,010	335	2,470	--	583	776	308	13,500	83,800	119
July	9,050	543	1,700	--	633	624	177	12,700	96,500	89
August	10,500	772	1,370	--	447	402	295	13,800	110,000	116
September	9,410	500	1,890	--	645	443	294	13,200	123,000	94
October	8,410	794	728	17	719	505	286	11,500	135,000	63
November	9,690	714	1,240	107	689	581	277	13,300	148,000	94
December:										
Australia	98	21	--	--	3	--	--	122	12,000	--
Brazil	48	--	--	--	--	--	--	48	1,450	--
Canada	3,870	357	--	107	113	480	--	4,930	65,400	1
Colombia	--	--	247	--	--	--	--	247	3,730	--
Dominican Republic	--	--	525	--	--	2	--	527	13,800	--
Finland	14	17	--	--	--	--	77	108	3,920	--
France	66	--	--	--	160	--	30	256	2,340	51
Germany	(5)	2	--	--	28	--	42	72	920	24
Japan	--	3	--	--	6	--	15	24	603	12
Mexico	--	--	--	--	25	199	2	226	2,610	--
New Caledonia	--	--	105	--	--	--	--	105	1,500	--
Norway	1,300	--	--	--	--	--	--	1,300	19,400	--
Russia	1,860	--	--	--	5	--	--	1,860	22,200	--
South Africa	--	--	--	--	--	--	--	--	669	--
Sweden	--	(5)	--	--	11	--	--	11	28	--
United Kingdom	--	14	--	3	222	--	6	245	2,770	10
Venezuela	--	--	--	--	--	2	--	2	252	--
Zimbabwe	58	--	--	--	--	--	--	58	1,510	--
Other	2	9	--	--	35	48	119	213	3,440	30
Total	7,310	423	877	110	608	731	291	10,400	159,000	128
2005: January-December	110,000	8,120	19,300	1,540	7,170	8,340	3,630	159,000	XX	1,060

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

³Excludes wrought nickel.

⁴May include revisions for prior months.

⁵Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF NICKEL, BY COUNTRY¹

(Metric tons, nickel content)²

Period and country of destination	Cathodes pellets, and briquets	Powder and flakes	Ferro-nickel	Metal-lurgical-grade oxide	Waste and scrap	Stainless steel scrap	Chemicals	Total ³	Total year to date	Wrought nickel
2004:										
December	27	196	23	98	1,030	2,980	227	4,580	56,300	95
January-December	972	2,130	68	201	12,400	35,900	4,630	56,300	XX	1,110
2005:										
January	37	211	1	161	1,230	2,400	228	4,270	4,270	63
February	31	165	3	3	877	3,960	316	5,360	9,620	57
March	91	160	12	7	1,070	3,990	289	5,630	15,200	131
April	82	190	6	4	902	5,710	344	7,230	22,500	104
May	84	373	11	2	777	3,230	452	4,930	27,400	129
June	168	176	9	2	523	2,950	460	4,280	31,700	214
July	173	113	4	3	814	3,020	335	4,460	36,200	105
August	91	84	--	1	1,270	3,350	506	5,300	41,500	156
September	147	85	4	5	1,150	3,950	315	5,650	47,100	105
October	134	148	1	8	1,040	3,450	281	5,070	52,200	94
November	70	116	4	5	1,000	3,640	271	5,100	57,300	79
December:										
Australia	--	(4)	--	--	33	--	--	33	537	2
Belgium	--	6	--	--	--	6	2	14	254	(4)
Canada	1	17	--	29	889	74	53	1,060	12,700	2
China	--	--	1	--	55	1,290	4	1,350	18,600	16
Finland	--	--	--	--	--	--	--	--	5,210	--
Germany	--	9	--	--	12	3	1	25	766	2
India	--	1	--	--	--	88	5	94	2,700	2
Italy	--	1	--	--	--	1,360	20	1,380	1,450	1
Japan	--	4	--	(4)	8	80	29	121	1,190	12
Korea, Republic of	--	4	--	--	--	282	10	296	4,020	8
Mexico	77	2	--	--	--	4	32	115	3,620	6
Netherlands	--	--	--	--	--	446	11	457	1,040	--
South Africa	--	(4)	--	--	--	--	--	(4)	92	--
Spain	--	--	--	--	--	--	--	--	795	--
Sweden	--	(4)	--	--	30	--	--	30	407	--
Taiwan	--	2	--	(4)	--	443	12	457	5,470	2
United Kingdom	--	5	12	2	56	25	10	110	1,230	3
Other	2	36	8	2	--	102	241	391	3,150	43
Total	80	87	21	33	1,080	4,200	430	5,940	63,200	99
2005: January-December	1,190	1,910	72	232	11,700	43,800	4,230	63,200	XX	1,340

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²The nickel contents are assumed to be as follows: metallurgical-grade oxide (77%), waste and scrap (50%), and stainless steel scrap (7.5%). The chemicals category includes chlorides (25%); sulfates (22%); other salts (22%); supported catalysts (22%); and oxide, sesquioxide, and hydroxide (65%).

³Excludes wrought nickel.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6
U.S. IMPORTS FOR CONSUMPTION OF NICKEL ALLOYS, BY COUNTRY¹

(Metric tons, gross weight)

Period and country of origin	Unwrought alloyed ingot	Bars, rods and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
2004:									
December	269	300	588	226	43	106	145	1,680	19,900
January-December	3,000	3,120	5,740	2,590	322	3,060	2,080	19,900	XX
2005:									
January	273	220	600	234	35	67	304	1,730	1,730
February	329	255	422	257	49	175	202	1,690	3,420
March:	361	294	629	316	16	103	173	1,890	5,320
April	241	338	486	274	33	143	176	1,690	7,010
May	310	355	662	324	43	148	152	1,990	9,000
June	437	422	558	260	20	159	237	2,090	11,100
July	325	342	603	275	29	64	194	1,830	12,900
August	447	360	462	242	20	172	293	2,000	14,900
September	644	314	500	241	34	176	156	2,070	17,000
October	491	333	480	241	20	170	466	2,200	19,200
November	551	214	629	262	16	286	198	2,160	21,300
December:									
Australia	200	--	1	--	--	--	1	202	1,770
Belgium	--	--	(2)	--	--	--	(2)	(2)	100
Canada	--	6	1	--	(2)	11	125	143	683
China	--	--	19	--	--	(2)	61	80	989
France	--	1	234	14	--	30	2	281	2,380
Germany	48	70	154	202	35	51	6	566	9,470
Italy	95	153	4	--	--	3	(2)	255	1,590
Japan	(2)	--	2	1	--	71	(2)	74	392
Mexico	--	--	--	--	--	--	3	3	149
Netherlands	--	--	(2)	--	--	--	6	6	178
South Africa	39	--	--	--	--	--	--	39	472
Sweden	--	7	110	3	--	14	--	134	2,320
United Kingdom	27	34	6	1	--	3	3	74	1,360
Other	20	24	21	--	--	--	36	101	1,450
Total	429	295	552	221	35	183	243	1,960	23,300
2005: January-December	4,840	3,740	6,580	3,150	350	1,850	2,790	23,300	XX

XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7
U.S. EXPORTS OF NICKEL ALLOYS, BY COUNTRY¹

(Metric tons, gross weight)

Period and country of destination	Unwrought alloyed ingot	Bars, rods and profiles	Wire	Plates and sheets	Foil	Tubes and pipes	Other alloyed articles	Total	Total year to date
2004:									
December	823	1,100	157	350	5	150	244	2,830	29,700
January-December	7,510	10,400	1,850	4,470	244	1,800	3,440	29,700	XX
2005:									
January	994	1,180	84	312	11	226	186	2,990	2,990
February	910	1,050	104	392	10	163	278	2,910	5,900
March	1,200	1,350	178	388	7	200	404	3,730	9,630
April	499	1,350	135	340	8	190	281	2,800	12,400
May	1,200	1,170	158	378	3	191	268	3,370	15,800
June	726	1,220	108	275	5	216	272	2,820	18,600
July	1,130	1,060	170	409	5	211	293	3,280	21,900
August	1,010	1,310	114	301	9	285	360	3,390	25,300
September	565	1,250	92	398	26	237	286	2,850	28,100
October	731	1,100	125	393	27	417	401	3,190	31,300
November	628	1,430	104	335	5	419	288 ^r	3,210 ^r	34,500
December:									
Australia	--	2	(2)	--	--	1	(2)	3	66
Belgium	127	301	12	45	--	(2)	(2)	485	4,330
Canada	4	71	17	61	1	34	26	214	2,270
China	1	77	8	35	--	29	30	180	2,520
France	74	391	(2)	5	1	1	3	475	5,080
Germany	8	79	1	6	(2)	21	(2)	115	1,530
India	--	--	--	3	--	2	(2)	5	372
Ireland	--	--	(2)	3	--	--	(2)	3	64
Israel	10	89	1	4	--	(2)	(2)	104	1,160
Italy	30	10	1	6	(2)	(2)	1	48	1,120
Japan	325	66	1	7	(2)	8	1	408	6,610
Korea, Republic of	(2)	44	1	21	(2)	4	1	71	827
Mexico	(2)	38	10	2	(2)	83	141	274	3,890
Netherlands	--	2	(2)	5	--	4	5	16	217
Singapore	(2)	2	1	1	--	9	1	14	257
Spain	17	3	--	1	--	3	(2)	24	157
Sweden	--	(2)	(2)	3	--	(2)	5	8	232
Switzerland	45	4	(2)	1	--	(2)	1	51	292
Taiwan	10	2	--	7	--	11	5	35	412
United Kingdom	15	305	2	29	1	4	12	368	3,430
Other	96	23	10	37	--	29	35	230	2,830
Total	762	1,509	65	282	3	243	267	3,130	37,700
2005: January-December	10,400	15,000	1,440	4,200	121	3,000	3,580	37,700	XX

^rRevised. XX Not applicable. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8
NICKEL CONSUMPTION IN CAST AND WROUGHT PRODUCTS

	Percent	
	Wrought	Cast
January 2006:		
Stainless and heat resisting steels	100	(1)
Alloy steels	100	(1)
Superalloys	90	10
Copper-nickel alloys	97	3
Other nickel-base alloys	100	(1)

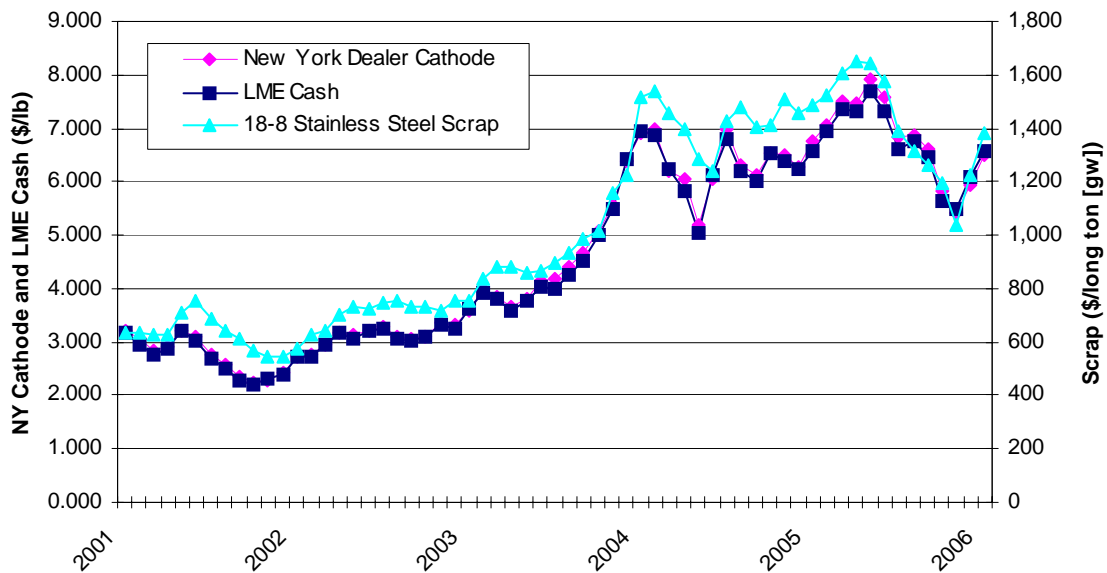
¹Less than ½ unit.

TABLE 9
NICKEL PRICES

Date	Platts Metals Week				American Metal Market
	Cathode NY Dealer \$/lb.	LME Cash mean ¹ \$/t	LME Cash mean ¹ \$/lb.	18/8 Stainless steel scrap Free market \$/long ton (gw)	18/8 Stainless steel scrap Pittsburgh \$/long ton (gw)
2005:					
Average for month of:					
January	6.748	14,501.250	6.578	1,487	1,513
February	7.065	15,344.625	6.960	1,520	1,513
March	7.510	16,184.524	7.341	1,609	1,563
April	7.480	16,136.429	7.319	1,647	1,685
May	7.920	16,919.750	7.675	1,645	1,629
June	7.564	16,154.432	7.328	1,578	1,610
July	6.820	14,570.833	6.609	1,390	1,538
August	6.863	14,886.932	6.753	1,315	1,388
September	6.610	14,223.088	6.451	1,260	1,388
October	5.840	12,396.548	5.623	1,194	1,350
November	5.429	12,111.477	5.494	1,038	1,244
December	5.923	13,425.625	6.090	1,225	1,193
Yearly average	6.814	14,737.960	6.685	1,409	1,469
2006:					
Average for week ending:					
January 6	6.001-6.371	13,903.125	6.306	1,300-1,355	1,175-1,200
January 13	6.460-6.718	14,655.500	6.648	1,350-1,375	1,275-1,300
January 20	6.588-6.611	14,535.000	6.593	1,350-1,375	1,300-1,325
January 27	6.581-6.804	14,758.000	6.694	1,450-1,475	1,300-1,325
February 3	6.922-7.171	15,098.000	6.848	1,450-1,500	1,300-1,325
February 10	6.977-7.158	15,080.500	6.840	1,450-1,500	1,400-1,425
February 17	6.918-7.177	14,985.000	6.797	1,475-1,550	1,400-1,425
February 24	6.957-7.053	14,835.000	6.729	1,500-1,550	1,400-1,425
March 3	6.963-7.032	14,911.500	6.764	1,490-1,525	1,400-1,425
March 10	6.848-7.134	14,765.500	6.698	1,475-1,525	1,500-1,525
March 17	6.898-6.964	14,740.000	6.686	1,475-1,500	1,500-1,525
March 24	6.955-7.089	14,894.500	6.756	1,475-1,500	1,500-1,525
March 31	7.080-7.093	15,135.500	6.865	1,500-1,525	1,500-1,525
Average for month of:					
January	6.408	14,549.643	6.600	1,379	1,275
February	6.944	14,975.000	6.793	1,497	1,387
March	6.949	14,890.043	6.754	1,499	1,493

¹Mean of the cash buyer price and the cash seller and settlement price.

2001-2006 AVERAGE MONTHLY PRICES (Derived from Metals Week and American Metal Market quotations)



2001-2006 STOCKS

